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10/579,962	05/18/2006	Harald Schuler	8952-000006/US/NP	9263
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HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				
EXAMINER				
BROWN, DREW J				
ART UNIT		PAPER NUMBER		
3616				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/579,962

**Applicant(s)**

SCHULER ET AL.

**Examiner**

DREW J. BROWN

**Art Unit**

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/18/06 (preliminary amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 5/18/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 6 and 16 are objected to because of the following informalities:  
In line 1 of claim 6, "any" should be deleted.  
In line 2 of claim 16, "occupant of the seat" should be changed to --occupant in the seat--.  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Browne et al. (U.S. Pub. No. 2003/0001372).

Browne et al. disclose a blocking unit (36) and a reversible drive (45) to drive the blocking unit, in response to a first signal, from an initial position to an operative position (paragraph 32, lines 1-5), the drive being associated with a timing arrangement to control the drive to return the blocking unit to the initial position after a predetermined period of time (paragraph 32, lines 5-7), the arrangement incorporating an energy absorbing element (88), which is part of the drive (Figure 4), operative to absorb energy as the blocking unit is moved from the operative position by an applied force paragraph 46). A pre-crash sensor is provided and the first drive signal is generated in response to the sensing of a potential crash by the precrash sensor (paragraph 32, lines 8-13). The reversible drive incorporates a rack (Figure 3) or a piston and cylinder unit (paragraph 70, lines 10-12), wherein the safety arrangement provides front protection for a seat occupant in the event of a crash (Figures 1 and 2).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Behr et al. (U.S. Pat. No. 4,951,963).

Browne et al. disclose the claimed invention as discussed above and that a signal is supplied to stop the blocking unit from being driven further towards the operative position when the blocking element is moved into contact with an object, but does not disclose that a contact sensor supplies the signal, or that the seat is provided with a sensor to sense a parameter.

Behr et al., however, disclose a sensor (26) disposed on the surface of a blocking unit and that the seat is provided with a sensor to sense a parameter, wherein the sensor is able to detect the presence and weight of an occupant in the seat and a seat position sensor able to sense the position of the seat in the direction of the longitudinal axis of the vehicle (column 5, lines 64-68).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Browne et al. in view of the teachings of Behr et al. to have a contact sensor supply the signal to stop the blocking unit since contact sensors provide a reliable and accurate method of detecting the exact instance that two elements contact each other. It would also have been obvious to have a sensor in the seat to sense a parameter so the blocking unit can further be controlled based on additional parameters to better protect the occupant depending on the type or location of the occupant.

6. Claims 6-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Lee (U.S. Pat. No. 4,518,183).

Browne et al. disclose the claimed invention as discussed above and that the energy absorbing element is actuated in response to a second signal (when blocking unit 36 is contacted)

but does not disclose that the energy absorbing element is an inflatable element. Lee, however, discloses that the energy absorbing element is an inflatable element (50; column 4, lines 14-25). Because both Browne et al. and Lee teach methods for absorbing energy from an impact, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of absorbing energy from the impact of a collision.

With respect to claim 12, although Browne et al. disclose that a signal is generated based on a force of knees impacting the blocking unit, Browne et al. does not specifically disclose that the signal is supplied by a crash sensor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a crash sensor to generate the second signal in response to the sensing of crash, since it is old and well known in the art that crash sensors are used to determine a collision event.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Lee, and further in view of Behr et al.

The combination of Browne et al. and Lee discloses the claimed invention as discussed above and that a signal is supplied to stop the blocking unit from being driven further towards the operative position when the blocking element is moved into contact with an object, but does not disclose that a contact sensor supplies the signal. Behr et al., however, disclose a sensor (26) disposed on the surface of a blocking unit. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Browne et al. in view of the teachings of Behr et al. to have a contact sensor supply the signal to stop the blocking unit since contact sensors provide a reliable and accurate method of detecting the exact instance that two elements contact each other.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Lee, and further in view of Desrochers et al. (U.S. Pub. No. 2003/0173120 A1).

The combination of Browne et al. and Lee discloses the claimed invention as discussed above but does not disclose that the crash sensor indicates the degree of severity of a crash. Desrochers et al., however, does disclose a crash sensor that indicates the degree of severity of a crash (paragraph 1). Therefore, it would have been obvious to one having ordinary skill in the

art at the time the invention was made to further modify the invention of Browne et al. in view of the teachings of Desrochers et al. to indicate the severity of a crash so the blocking unit can be further controlled to better protect the occupant.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. in view of Lee, and further in view of Muller et al. (U.S. Pub. No. 2002/0153716 A1)

The combination of Browne et al. and Lee discloses the claimed invention as discussed above but does not disclose that the inflatable element is inflated by a multistage gas generator, that is controlled by a controller responsive to sensed parameters. Muller et al., however, disclose that an inflatable element is inflated by a multistage gas generator that is controlled by a controller responsive to sensed parameters (paragraph 5). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Browne et al. in view of the teachings of Muller et al. to use a multistage gas generator in order to inflate the airbag at different pressures associated with seriousness of the accident.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arwood et al. and Tajima et al. disclose similar safety arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DREW J. BROWN whose telephone number is (571)272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Drew J. Brown  
Examiner  
Art Unit 3616

db  
5/2/08  
/Ruth Ilan/  
Primary Examiner, Art Unit 3616